



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
HOUSTON BRANCH
10625 FALLSTONE RD.
HOUSTON, TEXAS 77099

July 26, 2012

MEMORANDUM

SUBJECT: Contract Laboratory Program Data Review
FROM: *Raymond Flores*
Raymond Flores, Alternate ESAT Regional Project Officer
Environmental Services Branch (6MD-HL)
TO: Bret Kendrick, Superfund Project Manager (6SF-TR)

Site: MANUFACTURING SPECIALTIES INC.
Case#: 42562
SDG#: MF5WA4

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.



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ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: July 25, 2012
TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA
FROM: Linda Hoffman, Data Reviewer, ESAT
THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT **D63**
SUBJECT: CLP Data Review

Contract No.: EP-W-06-030
TO No.: 030
Task/Sub-Task: 2-12
ESAT Doc. No.: B030-212-0054
TDF No.: 6-12-395B
ESAT File No.: I-0542

Attached is the data review summary for Case # 42562
SDG # MF5WA4
Site Manufacturing Specialties, Inc.

COMMENTS:

I. LEVEL OF DATA REVIEW

Region 6 Standard review was performed for this data package.

II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

The CCS stated the required Form 5B, for reporting the results of the post-digestion matrix spike analysis, was missing. However, hardcopy review determined from the submitted raw data that the laboratory did not perform the contract-required post-digestion matrix spike analysis for antimony (ISM01.3, p. D-24/ICP-MS, sec. 12.6.5). Therefore, the antimony results were qualified as unusable although had there been the post-digestion matrix spike analysis, the antimony results may only have needed to be qualified as estimated.

III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

Some results were qualified for technical problems. The significant problems are addressed below.

- A. Laboratory blank readings caused the qualification of two cyanide results.
- B. The antimony pre-digestion matrix spike recovery was below the 30% QC limit, rendering all antimony results unusable.

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INORGANIC REGIONAL DATA ASSESSMENT

CASE NO. <u>42562</u>	SITE <u>Manufacturing Specialties, Inc.</u>
LABORATORY <u>BONNER</u>	NO. OF SAMPLES <u>16</u>
CONTRACT# <u>EP-W-09-037</u>	MATRIX <u>Soil</u>
SDG# <u>MF5WA4</u>	REVIEWER (IF NOT ESB) <u>ESAT</u>
SOW# <u>ISM01.3</u>	REVIEWER'S NAME <u>Linda Hoffman</u>
SF# <u>303DD2A6DC</u>	COMPLETION DATE <u>July 25, 2012</u>

SAMPLE NO.	<u>MF5WA0</u>	<u>MF5WA4</u>	<u>MF5WA8</u>	<u>MF5WB2</u>	<u> </u>
	<u>MF5WA1</u>	<u>MF5WA5</u>	<u>MF5WA9</u>	<u>MF5WB3</u>	<u> </u>
	<u>MF5WA2</u>	<u>MF5WA6</u>	<u>MF5WB0</u>	<u>MF5WB6</u>	<u> </u>
	<u>MF5WA3</u>	<u>MF5WA7</u>	<u>MF5WB1</u>	<u>MF5WB7</u>	<u> </u>

DATA ASSESSMENT SUMMARY

	ICP	HG	CN
1. HOLDING TIMES	<u>O</u>	<u>O</u>	<u>O</u>
2. CALIBRATIONS	<u>O</u>	<u>O</u>	<u>O</u>
3. BLANKS	<u>O</u>	<u>O</u>	<u>M</u>
4. MATRIX SPIKES	<u>M</u>	<u>O</u>	<u>O</u>
5. DUPLICATE ANALYSIS	<u>O</u>	<u>O</u>	<u>O</u>
6. ICP QC	<u>M</u>		
7. LCS	<u>O</u>		
8. SAMPLE VERIFICATION	<u>O</u>	<u>O</u>	<u>O</u>
9. OTHER QC	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
10. OVERALL ASSESSMENT	<u>M</u>	<u>O</u>	<u>M</u>

O = Data had no problems.
 M = Data qualified due to major or minor problems.
 Z = Data unacceptable.
 NA = Not applicable.

ACTION ITEMS:

AREAS OF CONCERN: Laboratory blank readings caused the qualification of two cyanide results. The antimony pre-digestion matrix spike recovery was below the QC limit, rendering the antimony results unusable. The serial dilution differences did not meet the expanded technical QC criteria for soils for calcium, iron, magnesium, and nickel.

**COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW**

**CASE 42562 SDG MF5WA4 SITE Manufacturing Specialties, Inc.
LAB BONNER**

COMMENTS: This SDG consisted of 16 soil samples for total metals (by ICP-MS and ICP-AES), mercury, and cyanide analyses following CLP SOW ISM01.3. The sampler designated samples MF5WA0 and MF5WA8 as laboratory QC samples. However, without contacting the SMO, the laboratory only performed QC analyses on sample MF5WA8 because only one set of QC analyses is required per SDG per matrix.

The SOW requires that the soil sample results be adjusted for moisture content and dilution, which raised the adjusted QLs above the CRQLs specified in the SOW. The adjusted CRQLs were reported by the laboratory and are referred to as SQLs in this report.

Standard review was performed for this data package as requested by the TDF. The target analytes of concern with the corresponding action levels in parentheses are arsenic (24.0 mg/kg), barium (8,000 mg/kg), chromium (33,000 mg/kg), lead (500 mg/kg), and mercury (3.6 mg/kg). None of the samples contained any of the analytes of concern at a concentration over the action level. The laboratory submitted only 20X diluted analyses for all samples to protect the instrument from high analyte concentrations, which were detected during screening.

DATA ASSESSMENT: The QC problems affecting data usability are addressed below.

- Because of laboratory blank readings, the reviewer qualified the cyanide results >SQLs for samples MF5WA6 and MF5WA7 as undetected ("U"-flagged) and the reported concentrations should be used as raised quantitation limits ("C"-flagged).
- Because of laboratory blank readings, the results <SQLs for the following analytes should be considered undetected and were flagged "U" at the SQLs on the DST: antimony, cobalt, lead, mercury, sodium, thallium, and cyanide.
- The reviewer qualified the antimony results as unusable because the pre-digestion matrix spike recovery for antimony was below the 30% QC limit and the post-digestion matrix spike analysis was not performed.
- The reviewer qualified the results for the following analytes as estimated because the serial dilution differences for these analytes exceeded the expanded QC limit for soils: calcium, iron, magnesium, and nickel.

OVERALL ASSESSMENT: Some results were qualified for all samples because of problems with laboratory blank readings, a matrix spike recovery, and/or serial dilution differences. ESAT's final data qualifiers in the DST indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the CSF, and the audit results were reported on the Evidence Inventory Checklist.

**INORGANIC QA REVIEW
CONTINUATION PAGE**

**CASE 42562 SDG MF5WA4 SITE Manufacturing Specialties, Inc.
LAB BONNER**

The laboratory was contacted for some reporting issues (see Resubmission Request). The laboratory response is not expected to impact the DST, so the DST included is probably the final version.

The laboratory submitted some pages that were missing from the hardcopy data package. The reviewer placed them at the beginning of the data package. The user should add pages 317 and 318, which the reviewer repaginated, to the CSF package in the appropriate place and should disregard the airbills, pages 270 and 271, because they are photocopies of the originals, which were submitted in the CSF package.

INORGANIC ACRONYMS

CADRE	Computer-Aided Data Review and Evaluation
CCB	Continuing Calibration Blank
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CN	Cyanide
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DST	Data Summary Table
HG	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IS	Internal Standard
LCS	Laboratory Control Sample
MDL	Method Detection Limit
NFG	National Functional Guidelines
PE	Performance Evaluation
%D	Percent Difference
%R	Percent Recovery
%RI	Percent Relative Intensity
%RSD	Percent Relative Standard Deviation
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RPD	Relative Percent Difference
RSCC	Regional Sample Control Center
SDG	Sample Delivery Group
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
TAL	Target Analyte List

HEADER DEFINITIONS FOR INORGANIC EXCEL DST

CASE: Case Number
SDG: SDG Number
EPASAMP: EPA Sample Number
LABID: Laboratory File/Sample ID
MATRIX: Sample Matrix
QCCOD: Sample QC Code
SMPQUAL: Sample Qualifier
ANDATE: Sample Analysis Date
ANTIME: Sample Analysis Time
CASNUM: Compound CAS Number
ANALYTE: Compound Name
CONC: Compound Concentration
VALDQAL: Region 6 Inorganic Data Validation Qualifier (see
Inorganic Data Qualifier Definitions on the next page)
UNITS: Concentration Units
ADJCRQL: Adjusted Contract Required Quantitation Limit Value
SMPDATE: Sampling Date
PRPDATE: Sample Preparation Date
LRDATE: Laboratory Receipt Date
LEVEL: Sample Level
PERSOLD: Sample Percent Solids
SMPWTVL: Sample Weight (Soil Samples)/Initial Sample Volume (Water
Samples)
FINLVOL: Final Sample Volume
METHOD: Method of Analysis
STATLOC: Station Location

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, ADJCRQL, VALDQAL, and PERSOLD. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

INORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U** Not detected at reported quantitation limit.
- L** Reported concentration is between the MDL and the CRQL.
- J** Result is estimated because of outlying quality control parameters such as matrix spike, serial dilution, etc., or the result is below the CRQL.
- R** Result is unusable.
- F** A possibility of a false negative exists.
- UC** Reported concentration should be used as a raised quantitation limit because of blank effects and/or laboratory or field contamination.
- +** High biased. Actual concentration may be lower than the concentration reported.
- Low biased. Actual concentration may be higher than the concentration reported.
- W** The result should be used with caution. The result was reported on a dry weight basis although the sample did not conform to the EPA Office of Water definition of a soil sample because of its high water content (>70% moisture).

CASE	SDG	EPASAMP	LABID	MATRIX	QCCODE	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPWTVL	FINVOL	METHOD	STATLOC
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7429905	Aluminum	30200		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440360	Antimony	26.6	UR	mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440382	Arsenic	6.4	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440393	Barium	194		mg/kg	133	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440417	Beryllium	1.4	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440439	Cadmium	0.33	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7440702	Calcium	29500	J	mg/kg	664	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440723	Chromium	37.5		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440484	Cobalt	13.3	U	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440508	Copper	14.6	LJ	mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7439896	Iron	19200	J	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7439921	Lead	17.5		mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7439954	Magnesium	3570	J	mg/kg	664	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7439965	Manganese	1000		mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/05/2012	13:02:46	7439976	Mercury	0.13	U	mg/kg	0.13	05/16/2012	06/05/2012	05/17/2012	Low	75.3	0.5	100	CV	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440020	Nickel	23.9	J	mg/kg	13.3	-05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7440097	Potassium	3330		mg/kg	664	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7782492	Selenium	0.90	LJ	mg/kg	66.4	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440224	Silver	0.42	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/03/2012	14:14:09	7440235	Sodium	664	U	mg/kg	664	05/16/2012	06/01/2012	05/17/2012	Low	75.3	1	100	P	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440280	Thallium	13.3	U	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440622	Vanadium	86.7		mg/kg	66.4	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	06/06/2012	00:39:02	7440666	Zinc	68.3		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.3	1	100	MS	SO-01
42562	MF5WA4	MF5WA0	1205240-07	S	Field_Sample	05/24/2012	09:01:08	57125	Cyanide	0.66	U	mg/kg	0.66	05/16/2012	05/23/2012	05/17/2012	Medium	75.3	1	50	AS	SO-01
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7429905	Aluminum	29000		mg/kg	25.7	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440360	Antimony	25.7	UR	mg/kg	25.7	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440382	Arsenic	7.5	LJ	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440393	Barium	175		mg/kg	129	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440417	Beryllium	1.3	LJ	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440439	Cadmium	0.32	LJ	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7440702	Calcium	55600	J	mg/kg	644	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440473	Chromium	37.3		mg/kg	25.7	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440484	Cobalt	12.9	U	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440508	Copper	13.9	LJ	mg/kg	25.7	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7439896	Iron	18500	J	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7439921	Lead	17.1		mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7439954	Magnesium	3440	J	mg/kg	644	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7439965	Manganese	896		mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/05/2012	13:04:40	7439976	Mercury	0.13	U	mg/kg	0.13	05/16/2012	06/05/2012	05/17/2012	Low	77.7	0.5	100	CV	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440020	Nickel	23.1	J	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7440097	Potassium	2770		mg/kg	644	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7782492	Selenium	1.0	LJ	mg/kg	64.4	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440224	Silver	0.25	LJ	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/03/2012	14:18:25	7440235	Sodium	644	U	mg/kg	644	05/16/2012	06/01/2012	05/17/2012	Low	77.7	1	100	P	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440280	Thallium	12.9	U	mg/kg	12.9	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440622	Vanadium	88.4		mg/kg	64.4	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	06/06/2012	00:43:10	7440666	Zinc	67.9		mg/kg	25.7	05/16/2012	06/01/2012	05/17/2012	Medium	77.7	1	100	MS	SO-02
42562	MF5WA4	MF5WA1	1205240-08	S	Field_Sample	05/24/2012	09:02:31	57125	Cyanide	0.64	U	mg/kg	0.64	05/16/2012	05/23/2012	05/17/2012	Medium	77.7	1	50	AS	SO-02
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/03/2012	14:22:42	7429905	Aluminum	28200		mg/kg	25.4	05/16/2012	06/01/2012	05/17/2012	Low	78.7	1	100	P	SO-03
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/06/2012	00:47:18	7440360	Antimony	25.4	UR	mg/kg	25.4	05/16/2012	06/01/2012	05/17/2012	Medium	78.7	1	100	MS	SO-03
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/06/2012	00:47:18	7440382	Arsenic	5.9	LJ	mg/kg	12.7	05/16/2012	06/01/2012	05/17/2012	Medium	78.7	1	100	MS	SO-03
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/06/2012	00:47:18	7440393	Barium	205		mg/kg	127	05/16/2012	06/01/2012	05/17/2012	Medium	78.7	1	100	MS	SO-03
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/06/2012	00:47:18	7440417	Beryllium	1.4	LJ	mg/kg	12.7	05/16/2012	06/01/2012	05/17/2012	Medium	78.7	1	100	MS	SO-03
42562	MF5WA4	MF5WA2	1205240-09	S	Field_Sample	06/06/2012	00:47:18	7440439	Cadmium	0.32	LJ	mg/kg	12.7	05/16/2								

42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7429905	Aluminum	28400		mg/kg	26.0	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440360	Antimony	26.0	UR	mg/kg	26.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440382	Arsenic	6.1	LJ	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440393	Barium	210		mg/kg	130	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440417	Beryllium	1.4	LJ	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440439	Cadmium	0.42	LJ	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7440702	Calcium	59500	J	mg/kg	650	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440473	Chromium	40.9		mg/kg	26.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440484	Cobalt	13.0	U	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440508	Copper	15.6	LJ	mg/kg	26.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7439896	Iron	17900	J	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7439921	Lead	20.2		mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7439954	Magnesium	3310	J	mg/kg	650	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7439965	Manganese	1110		mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/05/2012	13:08:35	7439976	Mercury	0.13	U	mg/kg	0.13	05/16/2012	06/05/2012	05/17/2012	Low	76.9	0.5	100	CV	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440020	Nickel	25.2	J	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7440097	Potassium	2640		mg/kg	650	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7782492	Selenium	1.2	LJ	mg/kg	65.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440224	Silver	0.58	LJ	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/03/2012	14:27:00	7440235	Sodium	650	U	mg/kg	650	05/16/2012	06/01/2012	05/17/2012	Low	76.9	1	100	P	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440280	Thallium	13.0	U	mg/kg	13.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440622	Vanadium	95.8		mg/kg	65.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	06/06/2012	00:51:27	7440666	Zinc	88.5		mg/kg	26.0	05/16/2012	06/01/2012	05/17/2012	Medium	76.9	1	100	MS	SO-04
42562	MF5WA4	MF5WA3	1205240-10	S	Field_Sample	05/24/2012	09:05:21	57125	Cyanide	0.65	U	mg/kg	0.65	05/16/2012	05/23/2012	05/17/2012	Medium	76.9	1	50	AS	SO-04
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	13:35:43	7429905	Aluminum	30600		mg/kg	27.2	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440360	Antimony	27.2	UR	mg/kg	27.2	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440382	Arsenic	4.9	LJ	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440393	Barium	168		mg/kg	136	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440417	Beryllium	1.6	LJ	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440439	Cadmium	0.66	LJ	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	15:05:41	7440702	Calcium	105000	J	mg/kg	2040	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440473	Chromium	34.9		mg/kg	27.2	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440484	Cobalt	13.6	U	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440508	Copper	12.7	LJ	mg/kg	27.2	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	13:35:43	7439896	Iron	18100	J	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7439921	Lead	13.6	U	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	13:35:43	7439954	Magnesium	3290	J	mg/kg	680	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7439965	Manganese	797		mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/05/2012	12:40:19	7439976	Mercury	0.14	U	mg/kg	0.14	05/08/2012	06/05/2012	05/16/2012	Low	73.5	0.5	100	CV	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440020	Nickel	21.0	J	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	13:35:43	7440097	Potassium	2840		mg/kg	680	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7782492	Selenium	2.8	LJ	mg/kg	68.0	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440224	Silver	9.3	LJ	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/03/2012	13:35:43	7440235	Sodium	680	U	mg/kg	680	05/08/2012	06/01/2012	05/16/2012	Low	73.5	1	100	P	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440280	Thallium	13.6	U	mg/kg	13.6	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440622	Vanadium	80.8		mg/kg	68.0	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	06/06/2012	00:01:52	7440666	Zinc	63.6		mg/kg	27.2	05/08/2012	06/01/2012	05/16/2012	Medium	73.5	1	100	MS	SO-05
42562	MF5WA4	MF5WA4	1205240-01	S	Field_Sample	05/24/2012	08:49:49	57125	Cyanide	0.68	U	mg/kg	0.68	05/08/2012	05/23/2012	05/16/2012	Medium	73.5	1	50	AS	SO-05
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/03/2012	13:40:02	7429905	Aluminum	18200		mg/kg	25.7	05/15/2012	06/01/2012	05/16/2012	Low	77.9	1	100	P	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/06/2012	00:05:59	7440360	Antimony	25.7	UR	mg/kg	25.7	05/15/2012	06/01/2012	05/16/2012	Medium	77.9	1	100	MS	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/06/2012	00:05:59	7440382	Arsenic	5.3	LJ	mg/kg	12.8	05/15/2012	06/01/2012	05/16/2012	Medium	77.9	1	100	MS	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/06/2012	00:05:59	7440393	Barium	155		mg/kg	128	05/15/2012	06/01/2012	05/16/2012	Medium	77.9	1	100	MS	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/06/2012	00:05:59	7440417	Beryllium	0.91	LJ	mg/kg	12.8	05/15/2012	06/01/2012	05/16/2012	Medium	77.9	1	100	MS	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/06/2012	00:05:59	7440439	Cadmium	1.4	LJ	mg/kg	12.8	05/15/2012	06/01/2012	05/16/2012	Medium	77.9	1	100	MS	SO-06
42562	MF5WA4	MF5WA5	1205240-02	S	Field_Sample	06/03/2012	13:40:02	7440702	Calcium	59500	J											

42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	13:44:09	7429905	Aluminum	21300		mg/kg	25.3	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440360	Antimony	25.3	UR	mg/kg	25.3	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440382	Arsenic	8.0	LJ	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440393	Barium	151		mg/kg	127	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440417	Beryllium	1.6	LJ	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440439	Cadmium	0.37	LJ	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	15:09:56	7440702	Calcium	81100	J	mg/kg	1900	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440473	Chromium	38.2		mg/kg	25.3	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440484	Cobalt	12.7	U	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440508	Copper	13.5	LJ	mg/kg	25.3	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	13:44:09	7439896	Iron	16800	J	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7439921	Lead	18.4		mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	13:44:09	7439954	Magnesium	2680	J	mg/kg	634	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7439965	Manganese	856		mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/05/2012	12:49:36	7439976	Mercury	0.13	U	mg/kg	0.13	05/15/2012	06/05/2012	05/16/2012	Low	78.9	0.5	100	CV	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440020	Nickel	25.1	J	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	13:44:09	7440097	Potassium	2190		mg/kg	634	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7782492	Selenium	0.80	LJ	mg/kg	63.4	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440224	Silver	9.4	LJ	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/03/2012	13:44:09	7440235	Sodium	634	U	mg/kg	634	05/15/2012	06/01/2012	05/16/2012	Low	78.9	1	100	P	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440280	Thallium	12.7	U	mg/kg	12.7	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440622	Vanadium	68.8		mg/kg	63.4	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	06/06/2012	00:10:07	7440666	Zinc	90.5		mg/kg	25.3	05/15/2012	06/01/2012	05/16/2012	Medium	78.9	1	100	MS	SO-07
42562	MF5WA4	MF5WA6	1205240-03	S	Field_Sample	05/24/2012	08:52:38	57125	Cyanide	1.1	UC	mg/kg	0.63	05/15/2012	05/23/2012	05/16/2012	Medium	78.9	1	50	AS	SO-07
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/03/2012	13:48:19	7429905	Aluminum	23000		mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440360	Antimony	26.1	UR	mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440382	Arsenic	6.9	LJ	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440393	Barium	141		mg/kg	130	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440417	Beryllium	1.1	LJ	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440439	Cadmium	0.52	LJ	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/03/2012	13:48:19	7440702	Calcium	5700	J	mg/kg	652	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440473	Chromium	55.3		mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440484	Cobalt	13.0	U	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440508	Copper	28.9		mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/05/2012	10:21:22	7439896	Iron	40600	J	mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7439921	Lead	83.4		mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/03/2012	13:48:19	7439954	Magnesium	2630	J	mg/kg	652	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7439965	Manganese	553		mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/05/2012	12:52:22	7439976	Mercury	0.13	U	mg/kg	0.13	05/15/2012	06/05/2012	05/16/2012	Low	76.7	0.5	100	CV	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440020	Nickel	24.0	J	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/03/2012	13:48:19	7440097	Potassium	2060		mg/kg	652	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7782492	Selenium	1.1	LJ	mg/kg	65.2	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440224	Silver	0.60	LJ	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/03/2012	13:48:19	7440235	Sodium	652	U	mg/kg	652	05/15/2012	06/01/2012	05/16/2012	Low	76.7	1	100	P	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440280	Thallium	13.0	U	mg/kg	13.0	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440622	Vanadium	74.0		mg/kg	65.2	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	06/06/2012	00:14:14	7440666	Zinc	1570		mg/kg	26.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.7	1	100	MS	SO-08
42562	MF5WA4	MF5WA7	1205240-04	S	Field_Sample	05/24/2012	08:54:03	57125	Cyanide	1.2	UC	mg/kg	0.65	05/15/2012	05/23/2012	05/16/2012	Medium	76.7	1	50	AS	SO-08
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/03/2012	13:52:38	7429905	Aluminum	24600		mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Low	76.0	1	100	P	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/06/2012	00:18:23	7440360	Antimony	26.3	UR	mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Medium	76.0	1	100	MS	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/06/2012	00:18:23	7440382	Arsenic	6.2	LJ	mg/kg	13.2	05/15/2012	06/01/2012	05/16/2012	Medium	76.0	1	100	MS	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/06/2012	00:18:23	7440393	Barium	157		mg/kg	132	05/15/2012	06/01/2012	05/16/2012	Medium	76.0	1	100	MS	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/06/2012	00:18:23	7440417	Beryllium	1.3	LJ	mg/kg	13.2	05/15/2012	06/01/2012	05/16/2012	Medium	76.0	1	100	MS	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/06/2012	00:18:23	7440439	Cadmium	0.36	LJ	mg/kg	13.2	05/15/2012	06/01/2012	05/16/2012	Medium	76.0	1	100	MS	SO-09
42562	MF5WA4	MF5WA8	1205240-05	S	Field_Sample	06/03/2012	13:52:38	7440702	Calcium	65100	J	mg/kg										

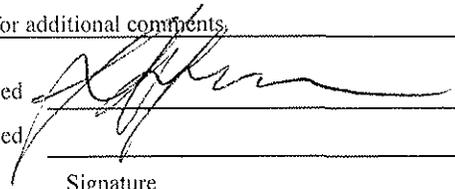
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	14:31:18	7429905	Aluminum	26100		mg/kg	27.2	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440360	Antimony	27.2	UR	mg/kg	27.2	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440382	Arsenic	6.6	LJ	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440393	Barium	151		mg/kg	136	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440417	Beryllium	1.2	LJ	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440439	Cadmium	0.75	LJ	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	15:22:42	7440702	Calcium	12000	J	mg/kg	2720	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440473	Chromium	37.7		mg/kg	27.2	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440484	Cobalt	13.6	U	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440508	Copper	23.2	LJ	mg/kg	27.2	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	14:31:18	7439896	Iron	18000	J	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7439921	Lead	35.5		mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	14:31:18	7439954	Magnesium	3410	J	mg/kg	679	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7439965	Manganese	755		mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/05/2012	13:10:28	7439976	Mercury	0.14	U	mg/kg	0.14	05/16/2012	06/05/2012	05/17/2012	Low	73.6	0.5	100	CV	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440020	Nickel	23.7	J	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	14:31:18	7440097	Potassium	2980		mg/kg	679	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7782492	Selenium	1.4	LJ	mg/kg	67.9	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440224	Silver	0.21	LJ	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/03/2012	14:31:18	7440235	Sodium	679	U	mg/kg	679	05/16/2012	06/01/2012	05/17/2012	Low	73.6	1	100	P	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440280	Thallium	13.6	U	mg/kg	13.6	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440622	Vanadium	76.4		mg/kg	67.9	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	06/06/2012	00:55:35	7440666	Zinc	153		mg/kg	27.2	05/16/2012	06/01/2012	05/17/2012	Medium	73.6	1	100	MS	SO-10
42562	MF5WA4	MF5WA9	1205240-11	S	Field_Sample	05/24/2012	09:06:46	57125	Cyanide	0.68	U	mg/kg	0.68	05/16/2012	05/23/2012	05/17/2012	Medium	73.6	1	50	AS	SO-10
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	14:09:53	7429905	Aluminum	26300		mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440360	Antimony	26.3	UR	mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440382	Arsenic	7.0	LJ	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440393	Barium	161		mg/kg	131	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440417	Beryllium	1.3	LJ	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440439	Cadmium	0.40	LJ	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	15:18:27	7440702	Calcium	96000	J	mg/kg	1970	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440473	Chromium	34.4		mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440484	Cobalt	13.1	U	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440508	Copper	12.8	LJ	mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	14:09:53	7439896	Iron	16600	J	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7439921	Lead	19.1		mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	14:09:53	7439954	Magnesium	3170	J	mg/kg	657	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7439965	Manganese	797		mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/05/2012	13:00:34	7439976	Mercury	0.13	U	mg/kg	0.13	05/15/2012	06/05/2012	05/16/2012	Low	76.1	0.5	100	CV	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440020	Nickel	22.5	J	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	14:09:53	7440097	Potassium	2750		mg/kg	657	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7782492	Selenium	0.99	LJ	mg/kg	65.7	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440224	Silver	0.26	LJ	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/03/2012	14:09:53	7440235	Sodium	657	U	mg/kg	657	05/15/2012	06/01/2012	05/16/2012	Low	76.1	1	100	P	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440280	Thallium	13.1	U	mg/kg	13.1	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440622	Vanadium	88.6		mg/kg	65.7	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	06/06/2012	00:34:54	7440666	Zinc	183		mg/kg	26.3	05/15/2012	06/01/2012	05/16/2012	Medium	76.1	1	100	MS	SO-11
42562	MF5WA4	MF5WB0	1205240-06	S	Field_Sample	05/24/2012	08:59:43	57125	Cyanide	0.66	U	mg/kg	0.66	05/15/2012	05/23/2012	05/16/2012	Medium	76.1	1	50	AS	SO-11
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/03/2012	14:35:37	7429905	Aluminum	22200		mg/kg	24.6	05/16/2012	06/01/2012	05/17/2012	Low	81.3	1	100	P	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/06/2012	00:59:42	7440360	Antimony	24.6	UR	mg/kg	24.6	05/16/2012	06/01/2012	05/17/2012	Medium	81.3	1	100	MS	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/06/2012	00:59:42	7440382	Arsenic	9.6	LJ	mg/kg	12.3	05/16/2012	06/01/2012	05/17/2012	Medium	81.3	1	100	MS	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/06/2012	00:59:42	7440393	Barium	342		mg/kg	123	05/16/2012	06/01/2012	05/17/2012	Medium	81.3	1	100	MS	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/06/2012	00:59:42	7440417	Beryllium	1.2	LJ	mg/kg	12.3	05/16/2012	06/01/2012	05/17/2012	Medium	81.3	1	100	MS	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/06/2012	00:59:42	7440439	Cadmium	0.33	LJ	mg/kg	12.3	05/16/2012	06/01/2012	05/17/2012	Medium	81.3	1	100	MS	SO-12
42562	MF5WA4	MF5WB1	1205240-12	S	Field_Sample	06/03/2012	15:26:58	7440702	Calcium	183000	J											

42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7429905	Aluminium	23900		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440360	Antimony	26.6	UR	mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440382	Arsenic	7.0	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440393	Barium	140		mg/kg	133	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440417	Beryllium	1.2	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440439	Cadmium	0.42	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7440702	Calcium	58200	J	mg/kg	665	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440473	Chromium	34.5		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440484	Cobalt	13.3	U	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440508	Copper	18.0	LJ	mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7439896	Iron	18300	J	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7439921	Lead	22.5		mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7439954	Magnesium	2810	J	mg/kg	665	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7439965	Manganese	594		mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/05/2012	13:21:20	7439976	Mercury	0.13	U	mg/kg	0.13	05/16/2012	06/05/2012	05/17/2012	Low	75.2	0.5	100	CV	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440020	Nickel	21.0	J	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7440097	Potassium	2430		mg/kg	665	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7782492	Selenium	1.2	LJ	mg/kg	66.5	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440224	Silver	0.092	LJ	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/03/2012	14:52:52	7440235	Sodium	665	U	mg/kg	665	05/16/2012	06/01/2012	05/17/2012	Low	75.2	1	100	P	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440280	Thallium	13.3	U	mg/kg	13.3	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440622	Vanadium	77.3		mg/kg	66.5	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	06/06/2012	01:16:13	7440666	Zinc	83.6		mg/kg	26.6	05/16/2012	06/01/2012	05/17/2012	Medium	75.2	1	100	MS	SO-18
42562	MF5WA4	MF5WB7	1205240-16	S	Field_Sample	05/24/2012	09:13:51	57125	Cyanide	0.66	U	mg/kg	0.66	05/16/2012	05/23/2012	05/17/2012	Medium	75.2	1	50	AS	SO-18

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. <u>42562</u>	SDG No. <u>MF5WA4</u>	SDG Nos. To Follow	Mod. Ref. No.	Date Rec <u>06/07/12</u>								
EPA Lab ID: <u>BONNER</u>	ORIGINALS			YES	NO	N/A						
Lab location: <u>Hattiesburg, MS</u>	CUSTODY SEALS											
Region: <u>6</u> Audit No.: <u>42562/MF5WA4</u>	1. Present on package?			X								
Resubmitted CSF? Yes _____ No <u>X</u>	2. Intact upon receipt?			X								
Box No(s): <u>1</u>	FORM DC-2											
COMMENTS: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Item</th> <th style="width: 95%;">Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td>Some "From" and "To" page numbers were incorrect for Item #35. The auditor made the appropriate corrections.</td> </tr> <tr> <td>Other</td> <td>The laboratory did not complete the "no. of shipments" field on Form DC-2-6. The auditor entered the appropriate information.</td> </tr> </tbody> </table>	Item	Description	3	Some "From" and "To" page numbers were incorrect for Item #35. The auditor made the appropriate corrections.	Other	The laboratory did not complete the "no. of shipments" field on Form DC-2-6. The auditor entered the appropriate information.	3. Numbering scheme accurate?				X	
	Item	Description										
	3	Some "From" and "To" page numbers were incorrect for Item #35. The auditor made the appropriate corrections.										
	Other	The laboratory did not complete the "no. of shipments" field on Form DC-2-6. The auditor entered the appropriate information.										
	4. Are enclosed documents listed?			X								
	5. Are listed documents enclosed?			X								
	FORM DC-1											
	6. Present?			X								
	7. Complete?			X								
	8. Accurate?			X								
	TRAFFIC REPORT/CHAIN-OF-CUSTODY RECORD(s)											
	9. Signed?			X								
	10. Dated?			X								
	AIRBILLS/AIRBILL STICKER											
	11. Present?			X								
	12. Signed?			X								
	13. Dated?			X								
	SAMPLE TAGS											
14. Does DC-1 list tags as being included?			X									
15. Present?			X									
OTHER DOCUMENTS												
16. Complete?			X									
17. Legible?			X									
18. Original?			X									
18a. If "NO", does the copy indicate where original documents are located?					X							

Over for additional comments.

Audited 
 Audited _____
 Signature

Linda Hoffman/ESAT Data Reviewer

 Printed Name/Title

Date 07/17/12

 Date

DC-2__

In Reference To Case No.:
42562 SDG: MF5WA4 (I-0542)

**Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM**

Resubmission Request

Laboratory Name: BONNER
Lab Contact: Chris Bonner
Region: 6
Regional Contact: Raymond Flores - EPA
ESAT Reviewer: Linda Hoffman - ESAT

In reference to data for the following fractions:

ICP-AES ICP-MS ICP-AES/ICP-MS/CN

Summary of Questions/Issues:

A. ICP-AES

1. Since aluminum, calcium, and magnesium were reported on the Form 4A on page 44 and results reported on the Form 16s on pages 82 - 84, these analytes should have an "X" on the associated Form 13 on page 72 for the calibration standards, ICV/CCV, and ICB/CCB analyses. In addition, results for these three analytes should be reported on the associated Forms 2 and 3. Please resubmit the Forms 2 (pp. 30 & 31), 3 (pp. 38 & 39), and 13 (p. 72) with aluminum, calcium, and magnesium results reported and the "X" placed for the corresponding analyses on Form 13.
2. The sample names on raw data pages 176 - 179 should have the suffix 05, not 02. Please correct and resubmit these pages.

B. ICP-MS

1. On the Form 13s on pages 72A and 73, a D/F of 20 was recorded for the ICV/CCVs, ICSA/ICSAB, ICB/CCBs, PBS, and LCS although these analyses were not diluted. Please correct and resubmit these pages.
2. On the Form 4B on page 45, all ICSA and ICSAB results were incorrectly multiplied by 20, resulting in non-compliant %Rs for all analytes. Please correct and resubmit this page.
3. Antimony was reported as undetected on the Form 1 (p. 16) for sample MF5WA5. However, the raw data (p. 240) result for this sample was 0.188 ug/L, which was >MDL provided to the EPA (0.16 ug/L). Therefore, the antimony result should be 0.48J. Please correct and resubmit page 16.

Resubmission Request

Continuation Page 2
Laboratory/Contact BONNER/Chris Bonner
In Reference To Case No. 42562 SDG: MF5WA4

C. ICP-AES/ICP-MS/CN

The negative concentrations with absolute values >MDLs were not reported on the Form 3s on pages 36, 40, and 42 for the ICBs, CCBs, and/or preparation blanks (ISM01.3, p. B-27, sec. 3.4.4.2.8). Please resubmit the Form 3s (pp. 36, 40, and 42) with the contract-required concentrations reported.

NOTE: Any submitted laboratory resubmission should be clearly marked as "Additional Data" with a cover letter included describing what data is being delivered, which Case the data pertains, and who requested the data (ISM01.3, p. B-8, sec. 2.2.1). Custody seals are required for all such shipments.

Please respond to the above item **within 6 business days (ISM01.3, p. B-8, sec. 2.2)** by e-mail to Flores.Raymond@epa.gov and by regular mail to:

Mr. Raymond Flores
U.S. EPA Region 6 Laboratory
10625 Fallstone Road
Houston, TX 77099

If you have any questions, please contact Mr. Flores at 281-983-2139.

Distribution: (1) Lab Copy, (2) Region Copy, and (3) ESAT Copy

